



Children's Ethical Reasoning and Meaning-making Through Wordless Picture Books: A Multiple Case Study

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Abstract

This study investigates how young children engage with wordless picture books in relation to their ethical reasoning and meaning-making processes. Conducted as a qualitative multiple case study encompassing five cases and a total of 25 children, the research is based on analyses of data derived from classroom interactions and children's drawings. The findings indicate that wordless visual narratives enable children to interpret emotions, reason through uncertainty, consider multiple narrative possibilities simultaneously, and develop ethical evaluations. Emotional interpretation was identified as the starting point of interaction with the narrative, with these interpretations orienting children toward ethical themes such as care, responsibility, justice, exclusion, and harm. The absence of written text supported children's open, flexible, and probabilistic engagement with narratives; in particular, moments in which the boundaries between imagination and reality were temporarily suspended strengthened exploratory and dialogic meaning making. Children's interpretations were grounded in experience-based contexts, including family life, school experiences, peer relationships, and environmental awareness. The study also reveals that children are positioned not only as interpreters but also as subjects who develop ethical and narrative agency. Overall, the findings demonstrate that wordless picture books offer powerful narrative tools that support emotional, ethical, and context-sensitive meaning-making in early childhood literacy contexts.

Keywords Early childhood literacy · Wordless picture books · Interactive reading · Ethical reasoning · Meaning making · Agency

Introduction

Picture books are widely regarded as important tools for activating both children's cognitive and affective skills. In this context, the growing prominence of wordless (silent) books in children's literature publishing since the second half of the twentieth century is particularly noteworthy (Crawford & Hade, 2000). By foregrounding a visual narrative system rather than verbal narration, wordless books position the reader as an active interpreter and, in doing

so, transcend linguistic boundaries to offer a more universal field of access. Consequently, the text can no longer be treated as a stable object or a limited structure (Barthes, 2009). When words and images fill in each other's gaps, the reader's role becomes more passive, as little space is left for imagination (Nikolajeva & Scott, 2000).

From a semiotic perspective, picture books function as complex meaning-making systems in which visual and verbal signs operate in synergy (Sipe, 1998). Meaning emerges not solely from what is explicitly presented, but from the reader's active negotiation of the gaps, tensions, and complementarities between modes. In such texts, readers must engage in an inferential process of "gap-filling" by supplying what is implied but not stated, thereby rendering interpretation inherently open, provisional, and dialogic (Sipe, 1998, 2000). In order for meaning to multiply, indeterminacy is not a weakness but a productive space in which multiple narrative possibilities, emotional interpretations, and ethical reflections can coexist. This understanding aligns with Sipe's (1999) broader framework, which emphasizes

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that literary response is shaped not only by the text itself but also by the dynamic interaction among author, reader, and sociocultural context. Because meaning is constructed through readers' active engagement with these semiotic gaps, interpretation is inevitably shaped by their linguistic, cultural, and experiential backgrounds. This variability helps explain why wordless books, grounded in visual narration rather than fixed verbal language, offer a flexible and potentially accessible entry point for readers of different ages and diverse linguistic contexts (Marciano et al., 2017).

Wordless picture books are considered a distinctive and independent genre in literature in that they construct meaning solely through nonverbal visuals (Arif & Hashim, 2008). In these books, the act of reading diverges from traditional "word-based" reading; however, this divergence is not viewed as a deviation from "real" reading but rather as an alternative mode of reading that lays the groundwork for multiple meaning-making. In wordless books, where the author structures interaction through visual cues rather than presenting the narrative directly to the reader, visual elements assume functions typically associated with verbal text, such as guiding the rhythm of page turning, advancing the visual narrative, and deepening observation. In this sense, silent books do not merely prompt the question "What is this?"; they also encourage a multilayered process of thinking about what an object or character might be, what it might evoke emotionally, and how it can be perceived (Larrick, 1976). Grounded in an open-ended reading process, this structure invites renewed discussion of the potential uses of wordless books, their reading contexts, and the interactive roles of children and adults, while simultaneously enriching the scope of qualitative and empirical research conducted in this field.

The Potential of Silent Books

Wordless books offer a unique reading experience that allows readers to blend their own past experiences and personal stories with the visual images they encounter. Owing to this open-ended structure, each reader embarks on an individual journey with the book, which makes wordless books both universal and deeply personal narrative tools. Accessible to all readers regardless of linguistic or cultural differences, these books hold particular potential for students who are in the process of learning a language or who come from diverse cultural backgrounds. They can serve as tools for exploring multicultural perspectives (Honaker & Miller, 2024). In the absence of words, such texts encourage readers to produce meaningful and original narratives based on their own linguistic resources and prior knowledge and schemas (Flatley, 1986). This quality renders wordless books powerful tools in multicultural classrooms, where

teachers can engage students in deep interaction and foster cultural awareness.

By moving beyond traditional reading experiences, wordless picture books actively engage readers' imagination and creative thinking skills. Readers' active participation in these books positions them as co-constructors of meaning (Arizpe, 2014). These books go beyond conventional, text-based reading practices to support the development of literacy skills and to move readers toward more sophisticated levels of storytelling (Giorgis & Johnson, 2022; Lysaker & Hopper, 2015; Postema, 2014). At the same time, they function as a bridge toward engagement with multimodal texts and graphic novels, helping readers to understand narrative conventions and explore alternative modes of communication (Booker, 2012).

Teachers can use wordless books to develop students' visual literacy, introduce social values such as empathy and tolerance, and promote creative and critical thinking in classroom settings (Arizpe et al., 2018; Arizpe & Ryan, 2018; Bosh, 2018; Read & Smith, 1982). As dialogic educational tools that nurture imagination, grant intellectual freedom, and enhance students' active participation in learning processes, wordless picture books are particularly prominent (Maine & McCaughran, 2021). Adaptable to special educational needs, these books are considered ideal for early childhood contexts and support the integration of multiple subject areas, in other words, curriculum integration (Jalongo et al., 2002).

Wordless Picture Books in the Classroom and Current Research

Arizpe (2014) notes that wordless books are regarded as ideal tools in educational research for examining language learning, storytelling, and other skills, and that studies have at times also been conducted with children with special educational needs. Despite the widespread belief that these books are suitable only for very young children or for those in the early stages of learning a new language, closer and more in-depth attention to the visuals in these picture books reveals that they contain aesthetically and cognitively rich resources for readers at all stages of language learning and literacy (Arizpe & Ryan, 2018). This makes wordless books valuable objects of study across all educational levels and for diverse groups, beginning from early literacy.

Research and classroom practices on the use of wordless books in education yield several key implications, foremost among them their significant contributions to children's language development and oral expression skills. Findings indicate that wordless books support literacy development across all age groups among learners of a foreign language (English) (Honaker & Miller, 2024), enhance bilingual

students' reading and writing skills as well as their oral communication (Hu & Commeyras, 2008), and contribute to children's reading comprehension and written expression during early literacy stages (Lubis, 2018; Lysaker & Hopper, 2015). In connection with the development of language skills, educational contexts created through wordless books have also been shown to increase students' vocabulary, which in turn supports expressive language production (Chaparro-Moreno et al., 2017; Grolig et al., 2020).

Research further demonstrates that wordless books support the development of multiliteracies. Although the age and characteristics of study groups vary, findings show that individuals explore the role of images in narrative and contribute to dialogically developed meaning-making grounded in both individual and social experiences. In this regard, each narrative is positioned within an intertextual continuum and is approached as a dialogic structure that responds to other narratives (experiences, situations, texts) and necessitates the recipient's response (Bakhtin, 1992, 2015). These studies report that students use visuals to construct narratives through strategies such as making connections, predicting, and drawing on prior knowledge, and that, compared to books with written text, narrative production with wordless books draws on a broader linguistic repertoire (Lee, 2024). They also indicate that as students are enriched through literature and subsequently produce their own wordless books, they become more critical and argumentative in their meaning making (Booker, 2012); that reading activities with wordless books through gamification can foreground different literacies within the framework of reader-response theory (Arif & Hashim, 2008; Flint & Adams, 2018); that collaborative meaning making encourages deep philosophical reflection on coexistence and social responsibility (Maine & McCaughran, 2021); and that discussing images during the reading of wordless books deepens students' understanding by transforming language into a productive act, leading students to enjoy the process of learning literacy (Louie & Sierschynski, 2015).

Wordless books support the development of creativity by encouraging readers to use their imagination. The absence of a text-bound narrative provides readers with opportunities to construct their own stories, allowing narratives to be shaped from a more critical perspective. A critical stance toward a narrative emerges in response to a specific task, question, problematic situation, or challenge; problem-solving, interpretation, and engagement in creative tasks arise within such contexts (Bailin et al., 1999; Lipman, 1988). In this regard, recent studies on wordless books indicate that children generally display a tendency toward creativity in their drawings, oral discussions, and narrative productions (Ching-Han et al., 2016), while others address creativity in

writing in particular through the development of visual literacy (Giorgis & Johnson, 2022).

The social-cognitive dimension of literacy and readers' identification with characters in visual narratives has also significantly shaped research on wordless books. These studies examine how young children use social understanding and efforts to imagine others' minds to comprehend narrative stories when reading wordless books (Lysaker et al., 2016); mothers' mental-state talk and children's social cognition across two different interaction contexts (telling a story from a wordless picture book and reading a story-book) (Ziv et al., 2013); and how children employ social imagination during wordless book reading and whether this process is observable (Lysaker & Miller, 2013). Through such experiences, children come to confront the fact that the language adopted in a text carries meanings beyond mere code selection, encompassing social uses and values associated with different modes of expression (Peters & Lankshear, 1996).

The applicability of wordless books across diverse cultural contexts generates multiple reasons for their use in classroom settings. These include enabling children to recognize their own cultural experiences, learn about other cultures, develop empathy toward those positioned as the "other," and explore the implications of multilingual approaches to the same visual text. Studies conducted within this scope address how reading a wordless book depicting the environmental features of another country can activate intercultural interaction across a broad and diverse age range and foster connections with students in distant locations (Marciano et al., 2017); the discussion of cultural awareness and sensitivity through the lens of critical literacy (Mantei & Kervin, 2015); the effects of shared access to the same content on reception in linguistically and culturally heterogeneous groups within the context of migration (Conrad et al., 2021); and how a wordless picture book version of a universal folktale activates culturally oriented knowledge among primary school children (Iordanaki, 2021).

Studies focusing on family involvement in wordless book reading experiences examine, in comparison with books containing text, the quality of language produced during wordless book reading and how fathers expand on topics (Conica et al., 2023), as well as the frequency of questions and prompts children of diverse cultural backgrounds require from their mothers during wordless book reading in relation to their developmental stages (Kuchirko et al., 2016). Collectively, these studies demonstrate that wordless books are not merely alternative reading forms centered on visual narration but rather multilayered pedagogical tools that support intercultural sensitivity and language development within family interactions.

Ethical Meaning-making in Multimodal Narrative Contexts

Multiliteracy approaches aim to enable children to understand communicative practices shaped within evolving meaning systems and new textual forms, while also fostering their capacity to become agentive subjects as readers. In this context, multiliteracy encompasses, on the one hand, the ability to construct and produce meaning across different semiotic modes, and, on the other hand, the capacity to participate critically in literacy practices operating within individual, cultural, and social contexts (Bazalgette & Buckingham, 2012; Pereira et al., 2023). In wordless picture books, readers must analyze visual signs such as facial expressions, spatial organization, body language, visual sequencing, and page transitions, and establish meaningful relationships among them to construct narrative coherence in the absence of written text (Pantaleo, 2024). This process involves not only the construction of narrative continuity but also the inferential evaluation of characters' intentions, emotional states, and the consequences of their actions. The shaping of the narrative around themes such as environment, cultural difference, relationships, or responsibility further supports children's engagement with different contextual literacy domains. Thus, in wordless narratives, multimodal and metacontextual interaction extends beyond comprehension and becomes a space for ethical reasoning in which alternative possibilities are discussed, relational dynamics are examined, and evaluative judgments are produced.

The complex structure of visual narration and the openness resulting from the absence of text provide readers with opportunities to develop multiple interpretations. The inherent indeterminacy of wordless picture books allows readers to generate diverse interpretations and to repeatedly reconsider their initial impressions (Serafini, 2014). This process is not a neutral act of decoding but a socially mediated activity shaped by prior experiences, cultural schemas, and capacities for perspective-taking. From a social-cognitive perspective, children draw on existing knowledge structures and relational understandings to infer characters' intentions, emotions, and outcomes (Nikolajeva, 2014). However, because wordless books do not provide explicit moral framing, ethical positions are not predetermined but must be negotiated. The interpretive gaps inherent in visual narratives invite children to engage with characters' desires, duties, and moral conflicts, thereby prompting evaluative and affective responses.

Accordingly, ethical meaning-making in wordless picture books can be understood as a process emerging at the intersection of multimodal literacy, social experience, and dialogic interpretation. Visual literacy provides the

interpretive tools; multiliteracy situates these tools within broader communicative practices; and social-cognitive processes support perspective-taking and inferential reasoning. Taken together, these dimensions frame the reading of wordless picture books as a multifaceted and socially grounded practice through which children develop ethically informed understandings of narrative events.

Research on wordless picture books has highlighted the value of these books in supporting children's language development, visual literacy, and classroom interaction, particularly within early literacy contexts. Much of this research has focused on how children use visual narratives to produce oral language, develop narrative skills, or participate in dialogic reading practices. By contrast, less attention has been given to how children use wordless narratives to negotiate emotions, consider alternative possibilities, and reflect on values related to relationships, difference, and responsibility. Building on this body of research, the present study approaches young children's interactions with wordless picture books as meaning-making processes that extend beyond purely linguistic outputs. Through a multiple case study design, the research reveals how children interpret emotions through visual cues, reason through uncertainty by considering multiple narrative possibilities, and articulate evaluative judgments in response to situations involving family relationships, social difference, and environmental issues.

Method

The purpose of this study is to analyze participants' wordless book reading experiences. For this reason, a multiple case study design, one of the qualitative research methods, was employed to identify issues from the participants' perspectives and to understand the meanings and interpretations they attribute to behaviors, events, or objects (Hennink et al., 2020). Detailed information regarding the participants, the process, data collection, and data analysis procedures is provided in the following subsections.

Participants

The participants consist of five classroom teachers working in public primary schools in different provinces of Türkiye and 25 first-grade students (ages 6–7), 15 girls and 10 boys. A purposive sampling method was employed to ensure a rich and diverse set of cases. Within this framework, students from cities with diverse cultural backgrounds and female and male teachers with varying academic experiences were selected. To prevent ethical violations, parental consent forms were obtained from the parents as the legal

Table 1 Information on teacher participants

Number	Gender	Age	Academic Experience (Years)	Province of Employment
Teacher 1 (T1)	Woman	47	24	Mardin
Teacher 2 (T2)	Woman	41	16	Hatay
Teacher 3 (T3)	Man	32	7	Sakarya
Teacher 4 (T4)	Woman	25	1	İstanbul
Teacher 5 (T5)	Man	36	11	Düzce

guardians of the child participants. Information regarding the participants is presented in Table 1.

Procedures

In the first phase of the study, five wordless picture books (Fig. 1) focusing on different themes (peer bullying, exploration of emotions, ecology, migration, multiculturalism, etc.) and suitable for use in interactive reading activities were selected by the researchers. The diversity of themes made it possible to examine comparatively how children's meaning-making processes are shaped across different contextual situations. This approach aims to demonstrate that the narrative potential of wordless picture books can emerge independently of content type. For each book, reading frameworks were prepared to guide teachers in classroom implementations, and during this process, in addition to the researchers, the opinions of two academics specializing in children's literature and interactive reading were consulted. In the subsequent phase, to increase contextual diversity, the aim was to identify teacher participants working in different geographical regions and with varying levels of professional experience. To this end, the necessary institutional permissions were obtained; after the scope and purpose of the research were explained, suitable participants were selected from among teachers working at the first-grade level of primary school. For the participating teachers, informational seminars were organized on five separate days, during which the selected wordless books were introduced, and the interactive reading frameworks were presented. At the end of the seminars, each teacher was asked to form an interactive reading group consisting of five students. The decision

to establish five groups was based on considerations such as increasing the effectiveness of the activities and enabling an in-depth qualitative examination of the interactional data from each group. After the groups were formed, teachers were given the freedom to choose the wordless book they wished to work with from among the five books. The rationale for leaving this choice to the teachers included allowing them to select a theme with which they felt comfortable, to use their creative potential more effectively, and to take into account the interests and needs of the student group they had identified. During the selection process, consensus was reached among the teachers, and each book was assigned to one teacher, resulting in five books being distributed across five different groups. Before implementation, students' parents were informed about the research process, and written consent forms were obtained. The implementation phase was then initiated. All teacher–student interactions were audio- or video-recorded, and at the end of each session, teachers documented the students' drawings by taking photographs. Each interactive reading session conducted with a wordless book lasted approximately 35–45 min. Information regarding the selected books is presented in Table 2. In addition, each teacher (e.g., Teacher 1 – T1) simultaneously identifies the interactive reading group (e.g., Group 1 – G1).

Data Collection and Analysis

During the data collection process, video and audio recordings, students' worksheets, and the researchers' reflective field notes were utilized. Observing the lessons through video or audio recordings allowed the researchers to avoid being physically present in the classroom as observers, which contributed to the creation of a natural learning environment in which students could express themselves more comfortably. This approach also emerged as a methodological necessity due to the study's implementation across different cities. Three of the five teachers recorded the interactive reading sessions on video, while two teachers preferred audio recordings only. Video recordings, in particular, provided the researchers with rich visual data for analyzing students' emotional states and non-verbal behaviors.



Fig. 1 Covers of wordless picture books

Table 2 Information on the wordless books used in the cases

Title/ Original Title	Themes	Author/Illustrator	Pub- lisher and Year	Group
Where is the Starfish?	Ecology, environmental awareness	Barroux	Barroux (2016)	G1
What is in My Moth- er's Tummy? (Qué es esta barriga?)	Emotions, problem- solving	Patricia Martinelli- Rocío Bonilla	Mer- tinelli (2022)	G2
Sweet Dreams (Jaduy-e Khab)	Imagination, children's cul- ture, and sleep routine	Mahsa Hedayati	Hedayati (2021)	G3
I Walk with Vanessa	Peer bullying, prejudice, mul- ticulturalism	Kerascoët	Ker- ascoët (2018)	G4
My Name is Blue (Io Sono Blu)	Othering, differences, self-esteem	Irene Guglielmi	Gug- lielm (2022)	G5

At the same time, both audio and visual recordings enabled the systematic examination of meanings that could be transcribed through content analysis (Krippendorff, 2018, p. 25). All data were repeatedly viewed and listened to by three individuals: one expert in mother tongue education (Author 1), one children's literature author (Author 2), and one specialist in drama and interactive reading. Within the framework of a multiple case study design, the researchers analyzed each case both within its own context and by considering similarities and differences across cases. During this process, observable themes, codes, and indicators were identified, discussed, and refined until consensus was reached. Examples drawn directly from students' verbal expressions were assigned to the identified themes. In addition, students' drawings contributed to revealing indicators that were not reflected in verbal data but were influential in meaning-making, thereby supporting the previously identified themes. Visual data were coded through recurring elements such as spatial positioning, facial expressions, symbols, and depicted actions; these codes were interpreted by taking into account children's verbal expressions and the narrative context of the wordless picture books. The content analysis approach employed not only revealed how students interacted with their teachers and peers but also provided the researchers with a systematic analytical framework for understanding the dialogues students constructed around both universal themes and contextually specific situations through wordless books. This analytical framework made

visible the multilayered meaning-making processes extending from children's emotional responses to their ethical reasoning, thereby enabling the study to be concluded thoroughly and systematically.

Findings

This section presents the findings derived from the analysis of children's interactions with five wordless picture books. The findings are organized around four main themes that reveal how children interpret emotions, reason in the face of uncertainty, relate visual narratives to their lived social worlds, and negotiate ethical meanings.

Universal Emotions and Ethical Responses

Emotionally Evoked Responses Triggered by Visual Narratives

Across all five books, children demonstrated a strong tendency to interpret characters' emotional states through visual cues such as facial expressions, body posture, spatial positioning, and color. In *Annemin Karnında Ne Var?*, children described the main character as “angry,” “sad,” or “looking at the crib badly,” linking these expressions to jealousy and emotional uncertainty associated with anticipating a sibling. In *Benim Adım Mavi*, sadness and loneliness were foregrounded, with children explaining that the character was excluded because of being different. In *Nerede Bu Denizyıldızı?*, emotional interpretations were connected to environmental conditions, as children suggested that the starfish might have fainted due to pollution. In addition, in children's drawings, marine animals were depicted as being aware that their habitats were under threat, and this situation was represented by the children as an emotional crisis (Fig. 6). In this representation, fear emerges not merely as an individual emotion but as an indicator of a shared perception of environmental threat. Similarly, in *Vanessa'nın Yanındayım*, children identified emotions such as fear, shame, and loneliness, particularly through Vanessa's lowered head, withdrawn posture, and physical distance from peers in playground scenes. In *Tatlı Rüyalar*, emotional engagement was marked by feelings of excitement, comfort, and safety. Children described the family environment—especially scenes depicting shared meals and bedtime routines—as “peaceful,” “happy,” and “safe.” Emotional responses were not limited to the characters alone; they were also reflected in the reading experience itself, as evidenced by children's increased excitement and their desire to revisit the visuals after the book had ended.

Fig. 2 Children's drawings from the *Benim Adım Mavi* (Theme: Othering, Differences, Self-Esteem)

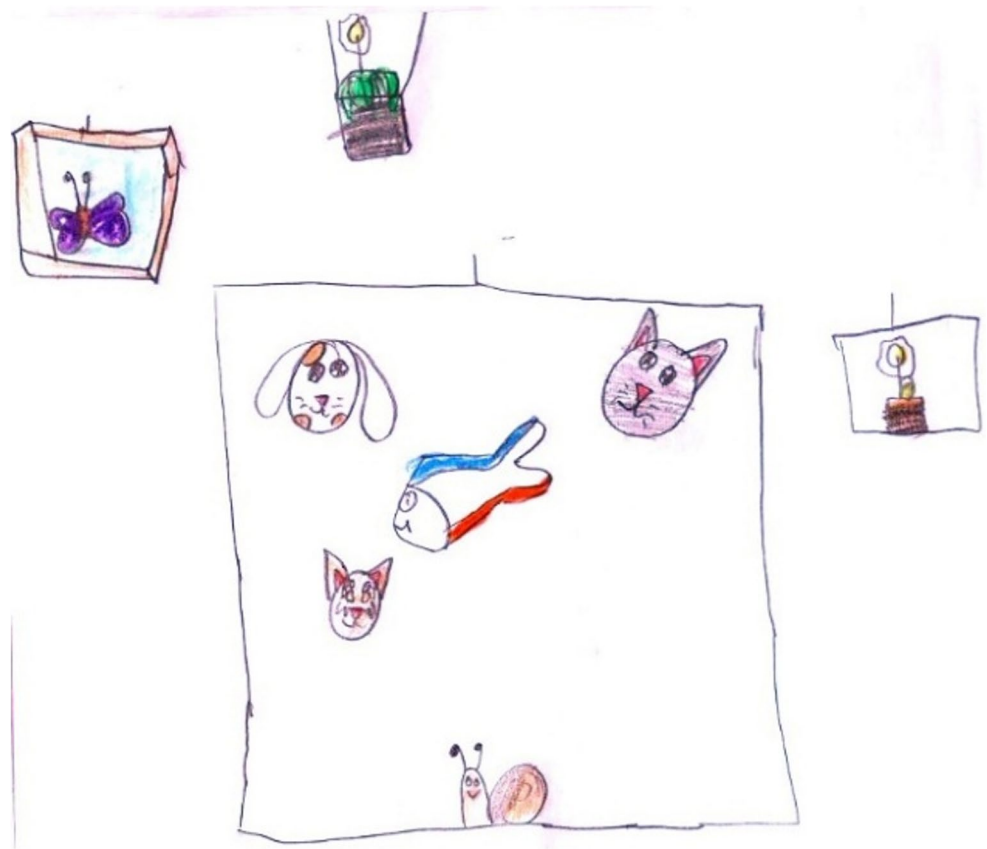


Fig. 3 Children's drawings from the *Annemin Karnında Ne Var?* (Theme: Emotions, Problem Solving)



Color associations in reading interactions (e.g., red for anger, gray for loneliness, pure white for happiness, and transparency for sadness) were used, along with recurring motifs such as hearts or enclosed spaces, in children's

drawings (Figs. 2 and 3) to convey emotional meanings. This indicates that emotional interpretation in wordless narratives is constructed through both concrete and symbolic visual resources.

Ethical Evaluation and Normative Judgments

Across all five cases, children moved beyond identifying emotions to evaluate characters' actions and situations in ethical terms. In *Benim Adım Mavi*, children explicitly stated that “being different is not a bad thing,” positioning exclusion and mockery as inappropriate behaviors. Children's drawings supported these statements by representing difference through metaphorical figures and confined spaces, foregrounding an understanding of coexistence that emphasizes recognition rather than change (Fig. 2). Drawings associated with *Annemin Karnında Ne Var?* further revealed how siblinghood was imagined not as a source of rivalry but as a relationally and emotionally secure extension of family life, often represented through recurring symbols of care and connection (Fig. 3). In *Nerede Bu Denizyıldızı?*, ethical judgments were shaped around environmental responsibility; children stated that trash should not be in the sea and that harming marine life ultimately harms humans as well. In *Vanessa'nın Yanındayım*, behaviors associated with bullying were clearly labeled as wrong, and children anticipated social consequences emerging through peer intervention. In *Tatlı Rüyalar*, ethical evaluation was less conflict-driven yet equally salient, emerging through emphases on cooperation, sharing, and helping one another during problem-solving challenges. Collectively, these findings indicate that ethical reasoning in wordless narratives is expressed not only through judgments of wrongdoing but also through values related to care, responsibility, harmony, and mutual support.

Possibility Thinking and Multiple Meaning Making in Wordless Narratives

Reasoning Through Uncertainty and Openness

Across all five books, children frequently accepted uncertainty and engaged in possibility-based reasoning. Expressions such as “maybe,” “it could be,” and “we don't know yet” were used consistently. In *Annemin Karnında Ne Var?*, children speculated about whether the mother was pregnant or joking and whether the child's feelings toward a sibling might change over time. In *Vanessa'nın Yanındayım*, children initially stated that they did not have a clear understanding of the story; as the narrative progressed, they gradually constructed meaning. In *Tatlı Rüyalar*, uncertainty took a different form. Children accepted imaginative elements—such as blankets turning into forests or animals—as natural components of the story world, without drawing a clear distinction between reality and imagination. This immersive engagement suggests that wordless narratives enable children to fully inhabit the narrative space by postponing the boundary between the real and the imagined. The tendency

to reason through uncertainty indicates that the absence of written text encourages children to remain open to multiple interpretations rather than searching for fixed meanings.

Completing the Narrative and Anticipating Possible Outcomes

Children actively expanded all five narratives by constructing causal explanations and imagining possible future developments. In *Annemin Karnında Ne Var?*, it was frequently anticipated that jealousy would turn into affection after the sibling's birth. In *Benim Adım Mavi*, children expected an emotional resolution once the character recognized shared differences. In *Nerede Bu Denizyıldızı?*, recovery was imagined through cleaning and caring for the environment. In *Vanessa'nın Yanındayım*, collective support was proposed as a way to prevent future exclusion. In *Tatlı Rüyalar*, children generated multiple solutions to narrative problems, such as rescuing a character who falls into the water or determining whether an approaching animal intends harm or help. In addition, drawings related to *Tatlı Rüyalar* supported the idea that imaginary spaces—such as clouds and rainbows—were treated as navigable narrative environments, reinforcing the role of possibility thinking in children's interactions with wordless picture books (Fig. 4). These narrative extensions predominantly emphasized themes of healing, cooperation, and reconstruction, demonstrating that children used wordless narratives as spaces for exploring hopeful and constructive possibilities.

Reflections of Contemporary Social Realities in Meaning Making

Family, Belonging, and Social Relationships

Children consistently grounded their interpretations in social experiences drawn from their own lived realities. In *What Is in Annemin Karnında Ne Var?*, meaning-making was shaped around family dynamics and sibling relationships. In *Benim Adım Mavi*, the theme of difference was extended to issues such as migration, language, and cultural diversity. During interactive reading, children interpreted the blue bee's difference as a source of social exclusion, emphasizing how a sense of belonging is disrupted through peer mockery and rejection. The bee's effort to change to resemble others was read as a desire for acceptance, and children understood belonging not as something rooted in innate similarity but as something negotiated through social relationships. In *Vanessa'nın Yanındayım*, school emerged as a central social space in which inclusion and exclusion became visible through peer interactions. Vanessa's loneliness in classroom and playground scenes was interpreted as

Fig. 4 Children's drawings from the *Tatlı Rüyalarda* (Theme: Imagination, children's culture, and sleep routine)



an indicator of social vulnerability, while the formation of a supportive peer group was framed as a collective response to injustice. Notably, children proposed group-based solutions to social problems, emphasizing that sharing concerns with others and acting together could change outcomes. This orientation was also reflected in students' drawings, where shared direction and movement, as well as multiple children confronting a bullying individual, were represented as visual indicators of collective action (Fig. 5). In *Tatlı Rüyalarda*, family life was interpreted through shared meals,

bedtime routines, and sleep practices. Children identified kinship roles and associated them with feelings of safety and belonging, framing the home as a secure environment that supports imagination-based exploration.

Ecological Awareness and Human–nature Relationships

Nerede Bu Denizyıldızı? prompted children to articulate ecological awareness by distinguishing between human and non-human spaces. Children defined the sea as a space

Fig. 5 Children's drawings from the *Vanessa'nın Yanındayım* (Theme: Peer bullying, prejudice, multiculturalism)



Fig. 6 Children's drawings from the *Nerede Bu Denizyıldızı* (Theme: Ecology, environmental awareness)



belonging to marine life and acknowledged the limitations of human presence within this environment. In *Tatlı Rüyalar*, although the setting was primarily domestic, the imagined natural landscapes created through blankets and sheets revealed children's capacity to relate to environments through imagination, highlighting their ability to form connections with nature via imaginative engagement.

Ethical Reasoning, Agency, and Collective Action

Across all five books, children articulated values related to responsibility, care, and helping behaviors. In *Vanessa'nın Yanındayım*, ethical reasoning most clearly transformed into imagined collective action, with children proposing group-based strategies to address exclusion. In drawings related to *Nerede Bu Denizyıldızı*?, ethical reasoning was constructed from the perspective of non-human beings. Marine creatures were represented not merely as affected objects but as subjects with emotions and voices. This positioning is evidenced by analytical indicators such as the inclusion of speech bubbles for sea creatures, the expression of emotions and demands through non-human entities, and ethical questions such as "Should we be sad?, Should we cry?" (Fig. 6). This representation demonstrates that children move beyond an anthropocentric framework when evaluating environmental issues and conceptualize ethical responsibility within human–nature relationships.

In *Tatlı Rüyalar*, ethical agency emerged through collaborative problem-solving and shared responsibility; children emphasized the importance of working together to

overcome challenges within the imagined narrative world. Notably, *Sweet Dreams* also revealed the significance of guided interaction in supporting ethical and narrative thinking. Adult prompts encouraged children to pause, reconsider events, and explore alternative possibilities, making visible the dialogic nature of meaning-making in wordless book interactions.

Overall, the findings indicate that wordless picture books function as flexible narrative spaces in which children integrate emotional understanding, ethical evaluation, possibility thinking, and social awareness. Although each book foregrounds different thematic foci, the underlying meaning-making processes remain consistent across cases, demonstrating the capacity of wordless visual narratives to support both universal and context-sensitive ethical and relational understandings in early childhood contexts.

Expanded Synthesis Across the Five Cases

An expanded synthesis of the five wordless picture books reveals a layered pattern in children's meaning-making that unfolds through emotional interpretation, ethical evaluation, narrative openness, and imagined forms of action. Although each book foregrounds different thematic foci -such as family relationships, difference and exclusion, environmental responsibility, peer solidarity, and imagination-based play-children's responses across the cases demonstrate shared interpretive processes shaped by the affordances of wordless visual narratives.

Emotional interpretation functioned as a consistent entry point across all five narratives. Children relied on visual cues such as facial expressions, body posture, spatial positioning, color, and symbolic motifs to identify emotions, including jealousy, sadness, fear, excitement, comfort, and joy. These emotional readings were not isolated reactions detached from the reading process; rather, they served as anchors for subsequent interpretive work. Across the cases, emotions operated as meaningful indicators that prompted children to question why characters felt as they did and how these emotional states might change over time.

Building on emotional understanding, children engaged in ethical evaluations across all five books by situating narrative situations within frameworks of care, responsibility, justice, and harm. In narratives addressing difference and exclusion (*Benim Adım Mavi*; *Vanessa'nın Yanındayım*), children articulated judgments that framed exclusion as unjust and kindness as necessary. In the environmental narrative (*Nerede Bu Denizyıldızı?*), ethical reasoning focused on responsibility toward non-human life and the consequences of human actions. In the family-centered narrative (*Annemin Karnında Ne Var?*), ethical evaluation emerged more implicitly through reflections on jealousy, empathy, and anticipated emotional change. In the imagination-centered narrative *Sweet Dreams*, ethical meanings were expressed through cooperation, shared responsibility, and mutual support in the face of imaginary challenges. Across all cases, ethical thinking developed relationally and without explicit moral instruction, indicating that wordless narratives enable values to be constructed through interpretation rather than transmitted didactically.

Another shared feature across the five cases was children's engagement with uncertainty and the openness of meaning. In the absence of written text, children frequently used probabilistic language and considered multiple explanations simultaneously for characters' intentions, emotions, and future actions. Rather than seeking definitive interpretations, they approached visual narratives as spaces open to multiple possibilities. In *Tatlı Rüyalalar*, this openness extended to the temporary suspension of the boundary between imagination and reality, with imagined environments treated as real narrative worlds at the beginning of the book. This pattern highlights the capacity of wordless narratives to support flexible and non-linear meaning-making processes.

Across all cases, children actively expanded the narratives by moving beyond the visual information presented. They constructed causal explanations, anticipated possible future outcomes, and proposed solutions to emerging problems. These narrative extensions often emphasized recovery, reconciliation, and togetherness—for example, siblings growing closer, excluded characters finding support,

environmental damage being repaired, or challenges being overcome through cooperation. In doing so, children transformed visual cues into coherent narrative arcs shaped by their own experiences and expectations.

Contextual and social knowledge played a central role in shaping children's interpretations. Children consistently grounded their meaning-making in lived experiences related to family life, school routines, migration, peer relationships, and environmental awareness. Universal themes embedded in the books were thus refracted through local and context-specific understandings, giving rise to meanings that were both shared and situationally grounded across the cases. In *Tatlı Rüyalalar*, domestic routines and bedtime practices provided a secure framework for imagination-based exploration, underscoring once again the importance of familiar social contexts in supporting engagement with narrative.

Notably, the five cases also reveal a progression in which ethical reasoning gives rise to imagined forms of agency. In *Benim Adım Mavi*, *Nerede Bu Denizyıldızı?*, and *Annemin Karnında Ne Var?*, ethical engagement remained largely at the level of evaluation, focusing on identifying what was unjust, harmful, or concerning. In *I'm With Vanessa*, children moved beyond evaluation to imagine collective action, emphasizing peer solidarity and shared responsibility. In *Tatlı Rüyalalar*, agency was expressed both through collaborative problem solving and individual imagination-based exploration, making visible the multiple forms of ethical and narrative agency supported by wordless storytelling.

Conclusion

This study examined how first-grade children (ages 6–7) interact with wordless picture books as narrative spaces for ethical reasoning and meaning-making. Across five cases, children's engagements with visual narratives consistently involved emotional interpretation, ethical evaluation, and open-ended reasoning, demonstrating that meaning making unfolds as a dynamic and relational process. As children shared their interpretations with peers and teachers, meanings were negotiated, expanded, and at times restructured. The absence of written language transformed the visual narrative from an authoritative text to be decoded into a shared space of interpretation, thereby strengthening dialogue. In this sense, silence functioned not as a lack but as an invitation, prompting children to listen to one another, respond, and collaboratively construct narrative coherence. Rather than functioning as simplified texts, wordless picture books have emerged as open narrative forms that invite children to participate actively in the construction of meaning (Barthes, 2009), requiring complex visual-semiotic work and demanding sophisticated

interpretive engagement from child readers (Pantaleo, 2023). These patterns align with narrative approaches that view narratives not as fixed structures but as interpretive acts shaped through interaction, experience, and dialogue (Bakhtin, 1992, 2015). Although each book offered different thematic foci, the underlying interactional processes remained strikingly consistent, highlighting the capacity of wordless visual narratives to support layered meaning-making that brings together universality and contextual specificity in early literacy contexts.

Children's ethical reflections emerged as an integral part of their engagement with the narratives. Rather than approaching the stories as neutral observers, children positioned themselves as subjects who consistently evaluated situations involving difference, exclusion, family relationships, cultural diversity, and environmental responsibility. In doing so, they enacted a form of context-sensitive, flexible, and decision-oriented responsible thinking (Lipman, 1988), making judgments about what to believe and how to act (Bailin et al., 1999). Importantly, ethical meanings were not imposed through explicit moral lessons; instead, they arose relationally as children considered how characters might feel and how situations could change.

The openness of wordless narratives also supported children's connections to their lived experiences. Across the cases, children grounded their interpretations in familiar social narratives such as family life, school experiences, migration, and environmental awareness. Universal themes embedded in the books were refracted through these contextual understandings, resulting in meanings that were both shared and locally grounded. This indicates that, despite the absence of verbal specificity, wordless picture books can function as culturally situated texts that invite children to draw on their own experiences in constructing narrative meaning. The findings support perspectives suggesting that language and images in narrative construction involve more than matters of code selection; they also entail choices about social uses and values associated with different forms and texts (e.g., essays, films, letters, or songs) (Peters & Lank-shear, 1996).

In narratives addressing peer relationships, children's ethical engagement extended beyond evaluation to include imagined forms of action. Particularly in *Vanessa'nın Yanındayım*, children developed collective responses to exclusion, emphasizing solidarity, shared responsibility, and group-based intervention. This shift from ethical awareness to imagined collective action positions children as active social subjects capable of envisioning change within peer communities. Such responses align with social actor perspectives that conceptualize children's agency as emerging through relationships with others and view wordless books

as prompts that foster collaborative meaning making, reflection on coexistence, and social responsibility (Maine & McCaughran, 2021).

Responses to narratives with environmental themes revealed children's emerging awareness of non-human life and spaces. Their attribution of agency to animals and their positioning of the sea as a space belonging to marine life indicate that narrative engagement extended beyond an anthropocentric perspective. By attending to cues in visual narratives, children demonstrated the capacity to negotiate the subjectivities of both human and non-human actors (Nodelman, 2018). This intersubjective stance strongly supports reading perspectives that reject the notion of a single, fixed subject and instead propose that a narrative's complex and shifting "subject" must be assembled by the reader through multiple individual consciousnesses (Nikolajeva, 2003).

Overall, this study demonstrates that wordless picture books function as open narrative forms that support emotionally grounded, ethically oriented, and dialogically constructed meaning-making in early childhood. As children interacted with these texts through talk and drawing, they did more than respond to images; they actively shaped narratives that integrated possibility, care, and relational understanding. These findings position wordless picture books as valuable resources in early literacy contexts that foreground children's interpretive agency and the narrative richness of visual storytelling.

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Declarations

Ethical approval The research protocol 202855 was approved by the University of Muş Alparslan Human Research Ethics Committee.

Informed consent All participants provided informed consent.

Conflict of interest No authors financially benefited from the research outside their usual employment remuneration.

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References

- Arif, M. M., & Hashim, F. (2008). Reading from the wordless: A case study on the use of wordless picture books. *English Language Teaching*, 1(1), 121–126. <https://doi.org/10.5539/elt.v1n1p121>
- Arizpe, E. (2014). Wordless picturebooks: critical and educational perspectives on meaning-making. (Ed.), *Aesthetic and Cognitive Challenges of the Picturebook* (pp. 91–108). Routledge. Bettina Kümmerling-Meibauer.
- Arizpe, E., McAdam, J., & Farrar, J. (2018). Picturebooks and literacy studies. Bettina Kümmerling-Meibauer (Ed.), *The Routledge Companion to Picturebooks*. Routledge.
- Arizpe, E., & Ryan, S. (2018). The wordless picturebook: Challenging attitudes about literacy and language learning in multilingual contexts. In J. Bland (Ed.), *Using Literature in English Language Education: Challenging Reading for 8–18 Year Olds* (pp. 63–82). Bloomsbury Academic.
- Bailin, S., Case, R., Coombs, J. R., & Daniels, L. B. (1999). Conceptualizing critical thinking. *Journal of Curriculum Studies*, 31(3), 285–302. <https://doi.org/10.1080/002202799183133>
- Bakhtin, M. (2015). *Dostoyevski poetikasının sorunları*. Metis Yayınları.
- Bakhtin, M. M. (1992). *The dialogic imagination: Four essays by M. M. Bakhtin* (ed. Michael Holquist, tr. Caryl Emerson and Michael Holquist). University of Texas Press.
- Barroux. (2016). *Nerede bu deniz yıldızı?* (Çiz. Barroux). Redhouse Kidz.
- Barthes, R. (2009). *S/Z. Yazı ve yorum*. çev. Tahsin Yücel. Metis Yayınları.
- Bazalgette, C., & Buckingham, D. (2012). Literacy, media and multimodality: A critical response. *Literacy*, 47(2), 95–102. <https://doi.org/10.1111/j.1741-4369.2012.00666.x>
- Booker, K. (2012). Using picturebooks to empower and inspire readers and writers in the upper primary classroom. *Literacy learning: The middle years*, 20(2), i–xiv. <https://search.informit.org/doi/10.3316/informit.419455058198350>
- Bosh, E. (2018). Wordless picturebooks. In B. Kümmerling-Meibauer (Ed.), *The Routledge Companion to Picturebooks* (pp. 191–200). Routledge.
- Chaparro-Moreno, L. J., Reali, F., & Maldonado-Carreño, C. (2017). Wordless picture books boost preschoolers' language production during shared reading. *Early Childhood Research Quarterly*, 40, 52–62. <https://doi.org/10.1016/j.ecresq.2017.03.001>
- Ching-Han, Y., Jui-Ching, C., & Mei-Ju, C. (2016). Empowering children's creativity with the instruction of wordless picture books. *European Journal of Research and Reflection in Educational Sciences Vol*, 4(7), 2–14.
- Conica, M., Kelly, L., Nixon, E., & Quigley, J. (2023). Father and toddler language during shared book reading with text-based and wordless picture books. *Reading Research Quarterly*, 58(4), 655–667. <https://doi.org/10.1002/trq.501>
- Conrad, M., Michalak, M., & Winter, E. (2021). A case study on interactive wordless picture books and their potentials within a multilingual classroom. *Journal of Literary Education*, 5, 7–32. <https://doi.org/10.7203/JLE.5.20811>
- Crawford, P. A., & Hade, D. D. (2000). Inside the picture, outside the frame: Semiotics and the reading of wordless picture books. *Journal of Research in Childhood Education*, 15(1), 66–80. <https://doi.org/10.1080/02568540009594776>
- Flatley, J. K., & Rutland, A. D. (1986). Using wordless picture books to teach linguistically/culturally different students. *The Reading Teacher*, 40(3), 276–281.
- Flint, T. K., & Adams, M. S. (2018). “It’s like playing, but learning”: Supporting early literacy through responsive play with wordless picturebooks. *Language Arts*, 96(1), 21–36. <https://doi.org/10.58680/la201829747>
- Giorgis, C., & Johnson, N. J. (2022). “It’s a radical decision not to use words”: Partnering with wordless picture books to enhance reading and writing. *Middle School Journal*, 53(4), 13–19. <https://doi.org/10.1080/00940771.2022.2095603>
- Grolig, L., Cohrdes, C., Tiffin-Richards, S. P., & Schroeder, S. (2020). Narrative dialogic reading with wordless picture books: A cluster-randomized intervention study. *Early Childhood Research Quarterly*, 51, 191–203. <https://doi.org/10.1016/j.ecresq.2019.11.002>
- Guglielmi, I. (2022). *Benim adım Mavi* (Çiz. I. Guglielmi). Timaş Çocuk.
- Hedayati, M. (2021). *Tatlı rüyalar* (Çiz. M. Hedayati). Ketebe Çocuk.
- Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative research methods*. Sage.
- Honaker, J. D., & Miller, R. T. (2024). Wordless but not silent: Unlocking the power of wordless picture books. *TESOL Journal*, 15(1), Article e721. <https://doi.org/10.1002/tesj.721>
- Hu, R., & Commeyras, M. (2008). A case study: Emergent biliteracy in English and Chinese of a 5-year-old Chinese child with wordless picture books. *Reading Psychology*, 29(1), 1–30. <https://doi.org/10.1080/02702710701260581>
- Iordanaki, L. (2021). Older children’s responses to wordless picturebooks: Making connections. *Children’s Literature in Education*, 52(4), 493–510. <https://doi.org/10.1007/s10583-020-09424-7>
- Jalongo, M. R., Dragich, D., Conrad, N. K., & Zhang, A. (2002). Using wordless picture books to support emergent literacy. *Early Childhood Education Journal*, 29(3), 167–177. <https://doi.org/10.1023/A:1014584509011>
- Kerascoët. (2018). *Vanessa’nın yanındayım* (Çiz. Kerascoët). Redhouse Kidz.
- Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*. Sage.
- Kuchirko, Y., Tamis-LeMonda, C. S., Luo, R., & Liang, E. (2016). “What happened next?”: Developmental changes in mothers’ questions to children. *Journal of Early Childhood Literacy*, 16(4), 498–521. <https://doi.org/10.1177/1468798415598822>
- Larrick, N. (1976). Wordless picture books and the teaching of reading. *The Reading Teacher*, 29(8), 743–746.
- Lee, C. (2024). Using wordless picturebooks to promote bilingual students’ translanguaging practices. *Journal of Research in Childhood Education*, 38(1), 123–144. <https://doi.org/10.1080/02568543.2023.2193258>
- Lipman, M. (1988). Critical thinking: What can it be? *Educational Leadership*, 46(1), 38–43.
- Louie, B., & Sierschynski, J. (2015). Enhancing English learners’ language development using wordless picture books. *The Reading Teacher*, 69(1), 103–111. <https://doi.org/10.1002/trtr.1376>
- Lubis, R. (2018). The progress of students’ reading comprehension through wordless picture books. *Advances in Language and Literary Studies*, 9(1), 48–52.
- Lysaker, J., & Hopper, E. (2015). A kindergartner’s emergent strategy use during wordless picture book reading. *The Reading Teacher*, 68(8), 649–657. <https://doi.org/10.1002/trtr.1352>
- Lysaker, J. T., & Miller, A. (2013). Engaging social imagination: The developmental work of wordless book reading. *Journal of Early Childhood Literacy*, 13(2), 147–174. <https://doi.org/10.1177/14687984114304>
- Lysaker, J. T., Shaw, K., & Alicia, Z. A. (2016). Emergent reading comprehension: Social imagination and kindergartners’ readings of a wordless picture book. *The Australian Journal of Language and Literacy*, 39(3), 245–255. <https://doi.org/10.1007/BF03651977>
- Maine, F., & McCaughan, B. (2021). Using wordless picturebooks as stimuli for dialogic engagement. In F. Maine, & M. Vrikki (Eds.),

- Dialogue for intercultural understanding: Placing cultural literacy at the heart of learning* (pp. 59–72). Springer.
- Mantei, J., & Kervin, L. (2015). Examining the interpretations children share from their reading of an almost wordless picture book during independent reading time. *The Australian Journal of Language and Literacy*, 38(3), 183–192. <https://doi.org/10.1007/BF03651899>
- Marciano, D. L., Rackley, J. M., & Vaughn, G. L. (2017). An American wordless picturebook in Italian classrooms: Inspiring global connections of people, places, and environments. *The Social Studies*, 108(6), 261–270. <https://doi.org/10.1080/00377996.2017.1391165>
- Martinelli, P. (2022). *Annemin karnunda ne var?* (Çiz. R. Bonilla). Beyaz Balina.
- Nikolajeva, M. (2003). *The rhetoric of character in children's literature*. The Scarecrow Press, Inc.
- Nikolajeva, M. (2014). *Reading for learning: Cognitive approaches to children's literature*. John Benjamins Publishing Company.
- Nikolajeva, M., & Scott, C. (2000). The dynamics of picturebook communication. *Children's Literature in Education*, 31, 225–239. <https://doi.org/10.1023/A:1026426902123>
- Nodelman, P. (2018). Picture books and illustration. In P. Hunt (Ed.), *International Companion Encyclopedia of Children's Literature* (pp. 154–165). Routledge.
- Pantaleo, S. (2023). Reviewing the multifaceted complexity and potential of wordless picturebooks. *Bookbird: A Journal of International Children's Literature*, 61(2), 15–25. <https://doi.org/10.1353/bkb.2023.0020>
- Pantaleo, S. (2024). Kindergarten children's talk about illustration techniques in an almost wordless picturebook. *Early Childhood Education Journal*, 52, 1281–1295. <https://doi.org/10.1007/s10643-023-01458-y>
- Pereira, Í. S. P., Gil, M., & Bunzen, C. (2023). Wordless picturebooks as resources for the construction of the pedagogy of multiliteracies: The case of migrants, by Issa Watanabe. *Children's Literature in Education*, 56, 69–89. <https://doi.org/10.1007/s10583-023-09544-w>
- Peters, M., & Lankshear, C. (1996). Critical literacy and digital texts. *Educational theory*, 46(1), 51–70.
- Postema, B. (2014). Following the pictures: Wordless comics for children. *Journal of Graphic Novels and Comics*, 5(3), 311–322. <https://doi.org/10.1080/21504857.2014.943541>
- Read, D., & Smith, H. M. (1982). Teaching visual literacy through wordless picture books. *The Reading Teacher*, 35(8), 928–933. <https://www.jstor.org/stable/20198128>
- Serafini, F. (2014). Exploring wordless picture books. *The Reading Teacher*, 68(1), 24–26. <https://doi.org/10.1002/trtr.1294>
- Sipe, L. R. (1998). How picture books work: A semiotically framed theory of text–picture relationships. *Children's Literature in Education*, 29, 97–108. <https://doi.org/10.1023/A:1022459009182>
- Sipe, L. R. (1999). Children's response to literature: Author, text, reader, context. *Theory Into Practice*, 38(3), 120–129. <https://doi.org/10.1080/00405849909543843>
- Sipe, L. R. (2000). The construction of literary understanding by first and second graders in oral response to picture storybook read-alouds. *Reading Research Quarterly*, 35(2), 252–275. <https://doi.org/10.1598/RRQ.35.2.4>
- Ziv, M., Smadja, M. L., & Aram, D. (2013). Mothers' mental-state discourse with preschoolers during storybook reading and wordless storybook telling. *Early Childhood Research Quarterly*, 28(1), 177–186. <https://doi.org/10.1016/j.ecresq.2012.05.005>

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